LONG RANGE PLAN FOR FIELD PLANTING

Featured Plant: Sorghastrum nutans

Common Name: Indiangrass

Cultivar or PI Number; PI-TO2936 Mid-summer forage

ADP Project Number and Use: 21 = 591 6

Background: This accession has been selected for mid-summer pasture because

of its performance in a naturalized pasture environment in

Virginia.

Approximate Duration of Planting: 6 years

Minimum Size of Field Planting, 5 acres 6.

Amount of Plant Materials Required Per Planting, 30-40 pounds PLS per planting.

Standard for Comparison: Technical Guide recommendation for mid-summer forage.

Allocations A consolidated long range plan including plantings from all participating states will be developed. Once completed, it will represent an allocation of plant materials to the identified field office for the specified year. Annual adjustments can be made to accommodate shortfall or surplus production.

PMC Production Responsibility: Quicksand

Planting Guide: Attached

Evaluation Requirements: Use ES-11 annually, completing each factor as

indicated on attached.

LONG RANGE PLAN - SCHEDULE FOR FIELD PLANTINGS

Species:

Sorghastrum nutans, Indiangrass, PI T02936

<u>STATE</u>	YEAR	MLRA	FIELD OFFICE	SOILS
VA KY	1982 1983 1985 1982 1982 1983	128 128 148 127 121	Christiansburg Staunton Warrenton Bath our my vill Madison - Rick. Winch out.	Francels Eden
TN	1984 Ky 1952 1983	121	Benton- anderson,	
OH	1983	126	Noble de Chao. P	
PA	1982	126	CARACTE	
	1984			
	1985			
	1986			

USDA SOIL CONSERVATION SERVICE

PLANTING GUIDE

SPECIES: Sorghastrum mutans, Indiangrass, PI-T02936

This accession was selected by the Quicksand PMC for production and desirable growth characteristics. It was collected from a 125 acre pasture in Virginia where it has been used in rotational grazing for many years. Indiangrass is widely used on the great plains and is frequently found throughout much of the Northeast.

SITE ADAPTATION

Indiangrass is best adapted to deep, fertile soils. It thrives on most soils except those that are very droughty or poorly drained. When selecting sites for field planting avoid very droughty and shallow soils.

SEEDING

Successful plantings of indiangrass require a well-prepared, firm seedbed free from weeds. Clearly the preferred method is to drill from April 10 to June 1. A poor alternative is to broadcast the seed and cultipack after seeding. It is essential the seed be covered and the seedbed firmed after seeding. Apply P and K to meet soil test or 400#/A of 0-20-20. Do not use nitrogen fertilizer at seeding. Seeding rates of 6-8 pounds of pure live seed per acre drilled or 10-12 broadcast. The seed you will receive can be planted with a grain drill which is strongly recommended.

MANAGEMENT DURING THE SEEDLING YEAR

During the first year, weeds should be moved to lessen the competition for water and nutrients and provide light to the new seedlings during the first year. If seedings a:e moved, use a rotary mover and adjust height to avoid clipping the tops off the new seedling (8-10 inches after August 1).

Four to six weeks following seeding, atrazine applied at a rate of 2 pounds per acre active ingredient for silt loams or heavier soils will help control weed growth the establishment year. Use only 1 pound per acre active Ingredient atrazine on soils lighter than silt loam. Atrazine may be purchased as wettable powder and can be applied in 20-30 gallons of water per acre. Be sure the material is evenly applied.

Control competitive broad-leaf weeds with 2,4-D at the recommended rate when new grass seedlings have four leaves per plant.

It is important to remember that indiangrass is slow growing. Do not become discouraged by early results. Stands which appear poor at the end of the first year usually develop into good stands the second year, The grass will not reach its full height until the end of the second growing season.

Do not graze the field during the seeding year. Two or more years may be required to establish productive stands if the above steps in the establishment of warm season grasses are omitted. If weeds are controlled the seeding year, and there is no reduction in the leaf surface of the newly seeded grass, it is possible to use the planting for pasture the second year.

USE AND MANAGEMENT

Indiangrass can be used for grazing or hay. Begin grazing in a rotation system before the first seed heads emerge from the sheath. The plants should be 18-24 inches tall. Graze to an 6-8 inch stubble height and allow plants to recovered to 24 inches before utilizing again. Usually two grazing periods are available each year.

For Hay, cut indiangrass at a 24-30 inch leaf height or when about 10 percent of the seedheads have emerged from the boot. Plants should be cut before heading for best quality hay. Cut indiangrass for hay at a 6 inch stubble height. The regrowth can be grazed after it has **recovered** to 20-24 inches.

FERTILIZER MANAGEMENT

A maintenance fertilizer application of 400-600 pounds of 0-20-20 or 0-14-14 per acre every third year plus 50 pounds nitrogen per acre annually may be needed for good production. The nitrogen will not only improve the quantity but the quality of production as well. Apply nitrogen in spring as new growth starts. Additional nitrogen can be applied if the 50 pounds does not produce a response. Indiangrass produces abundant forage on fertile sites without annual fertilizer applications, but such sites are rare.